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- 3. One or more computer-readable media as recited in claim 1, wherein the BOM, the higher-level manifest, and the lower-level manifest are accessed from a common distribution source.
- **4.** One or more computer-readable media as recited in 5 claim **1**, wherein the generating comprises updating the operating system image.
- 5. One or more computer-readable media as recited in claim 4, wherein the computer program, when executed, further causes the one or more processors to perform acts 10 including saving the updated bill of materials on the computer.
- **6**. One or more computer-readable media having stored thereon a computer program that includes computer readable instructions that, when executed by one or more processors 15 of a computer, causes the one or more processors to perform acts including:

receiving an updated version of a file for inclusion in an operating system;

accessing a bill of materials (BOM) to identify a first set 20 of higher-level components of said operating system; accessing a higher-level manifest corresponding to an individual component of said higher-level components, the higher-level manifest including a lower-level

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dependent component list of any lower-level components upon which the individual higher-level component depends, a priority order for the individual higher-level component relative to other components, and a version indicator for the individual higher-level component;

identifying a prior version of the file in a lower-level manifest corresponding to one of the lower-level dependent components,

adding the updated version of the file to the one of the lower-level dependent components, and updating the corresponding lower-level manifest;

updating the higher-level manifest in an instance where the higher-level manifest contains outdated version information; and,

updating the BOM in an instance where the BOM contains outdated information regarding the higher-level manifest.

7. One or more computer-readable media as recited in claim 6, wherein the bill of materials is stored on the computer.

\* \* \* \* \*